

What is claimed is:

1. A transmission controller of a V-belt type continuously variable automatic transmission comprising a primary pressure sensor and a secondary pressure sensor for detecting the pressure value of the primary pressure supplied to the cylinder chamber of the drive pulley and the pressure value of the secondary pressure supplied to the cylinder chamber of the driven pulley respectively, and a hydraulic pressure controller for performing the feedback control so as to allow pressure values detected by each of said sensors to match with the target secondary pressure and the target primary pressure calculated in response to the operational status, wherein:

the transmission controller of a V-belt type continuously variable automatic transmission comprises determination means for determining whether or not correlation between the pressure value corresponding to said primary pressure and the pressure value corresponding to said secondary pressure is actually an impossible relation; and

said hydraulic pressure controller prohibits the control based on said pressure value when said determination means determines said correlation to be actually an impossible relation.

2. The transmission controller of a V-belt type continuously variable automatic transmission according to claim 1, wherein the control based on said pressure value by said hydraulic pressure

controller is a feedback control which performs a feedback control so as to allow the pressure value detected by said secondary pressure sensor to match with the target secondary pressure calculated in response to the operational status, and a switchover means is provided to switchover to an open control while prohibiting said feedback control when said determination means determines said correlation to be actually an impossible relation.

10 3. The transmission controller of a V-belt type continuously variable automatic transmission according to claim 1, wherein when said determination means performs said determination when the actual transmission gear ratio is larger than the small transmission gear ratio limit value in overdrive and smaller 15 than the large transmission gear ratio limit value in low "gear."

20 4. The transmission controller of a V-belt type continuously variable automatic transmission according to claim 1, wherein said determination means performs said determination when the vehicle is under a non-idle state.

25 5. The transmission controller of the V-belt type continuously variable automatic transmission according to claim 1, wherein said determination means performs said determination when an actual primary pressure detected by the primary sensor is lower than the command value of a line pressure which is the main

pressure.

6. The transmission controller of a V-belt type continuously variable automatic transmission according to claim 1, wherein
5 said determination means performs said determination under a transmission steady-state.
7. The transmission controller of a V-belt type continuously variable automatic transmission according to claim 1, wherein
10 said determination means performs said determination when all the conditions as described in claims 3 to 7 are met.
8. The transmission controller of the V-belt type continuously variable automatic transmission according to claim 1, wherein
15 said hydraulic pressure controller prohibits a control based on said pressure value when said determination means has continuously determined said correlation to be actually an impossible relation in a predetermined period of time.
- 20 9. A method for controlling the transmission controller of a V-belt type continuously variable automatic transmission equipped with a primary pressure sensor and a secondary pressure sensor for detecting the pressure value of said primary pressure supplied to the cylinder chamber of a drive pulley and said pressure
25 value of said secondary pressure supplied to said cylinder chamber of a driven pulley; a hydraulic pressure controller for

controlling said primary pressure and said secondary pressure based on said pressure value and operational status detected by said sensors comprising the step of:

judging whether or not the correlation between the
5 pressure value corresponding to said primary pressure and said pressure value corresponding to said secondary pressure is actually an impossible relation; and

determining the state as either having failed at least among said primary pressure sensor or said secondary pressure
10 sensor when said judging step determines said correlation to be an actually impossible relation.

10. A method according to claim 9, wherein said judging step performs said judgment when the actual transmission gear ratio
15 is larger than the small transmission gear ratio limit value in overdrive and smaller than the large transmission gear ratio limit value in low "gear."

11. A method according to claim 9, wherein said judging step
20 performs said judgment when the vehicle is under a non-idle state.

12. A method according to claim 9, wherein said judging step performs said judgment when an actual primary pressure detected by the primary sensor is lower than the command value of a line
25 pressure which is the main pressure.

13. A method according to claim 9, wherein said judging step performs said judgment under a variable speed steady state.

14. A method according to claim 9, wherein said judging step
5 performs said judgment when all the conditions as described in claims 11 to 13 are met.

15. A method according to claim 9, wherein said judging step prohibits control based on said pressure value when said judging
10 step has continuously judged said correlation to be actually an impossible relation in a predetermined period of time.